

Title (en)  
MECHANICAL OIL/WATER EMULSIFIER.

Title (de)  
MECHANISCHER ÖL/WASSER EMULGATOR.

Title (fr)  
EMULSIFIANT MECANIQUE EAU/HUILE.

Publication  
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Application  
**EP 93925078 A 19931021**

Priority  
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• US 9310305 W 19931021

Abstract (en)  
[origin: GB2271725A] A mechanical emulsifier comprises an emulsifying stack including a first input 24, e.g. for oil, and a second input 12 - 14, e.g. for water, at one end of the stack and an output for the emulsion at the other end of the stack, the stack including alternating clockwise helix discs 26 and anticlockwise helix discs 25 with respective separators 16 mounted between discs 25, 26 such that the fluid mixture passes along a turbulent emulsifying pathway which is helical in a first direction through a first helix disc and which reverses at each disc transition. Some of the parts 25, 26, 6 may be integrally connected. When used in a diesel engine, a low-demand water injection mechanism (31 - 40, Fig 7, not shown) cuts off the water injection as the diesel engine slows down to a nominal rpm just above its idle speed, to eliminate the problem of water injection-caused stalling at idle speeds. <IMAGE>

IPC 1-7  
**B01F 5/06**

IPC 8 full level  
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Citation (search report)  
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• [A] FR 2255097 A1 19750718 - AGFA GEVAERT AG [DE]  
• [A] FR 2285923 A1 19760423 - ERDMANN EGON [DE]  
• [A] DE 2648086 A1 19770915 - GANDOLA & C S P A A, et al  
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